REMARKS

This Amendment is responsive to the Office Action mailed January 17, 2003. In that Office Action, the Examiner apparently rejected claims 1-10 and 14 under 35 U.S.C. §102(e) as being anticipated by Smith, U.S. Patent No. 6,493,184 ("Smith"). Additionally, the Examiner's indication that claims 11-13 would be allowable if rewritten is noted with appreciation. With this Response, claims 15-20 have been cancelled. It is believed that all claims are now in a condition for allowance. Notice to that effect is respectfully requested.

Claim Rejections under 35 U.S.C. § 102

The apparent rejection under 35 U.S.C. §102(e) is improper (it being noted that Paragraph 1 of the Office Action recites the language of 35 U.S.C. §102(e) while Paragraph 2 lists "102(b)" as the basis for rejection; to clarify, it is believed that notation of "102(b)" was a typographical error as there is no basis for the Smith patent qualifying as a 35 U.S.C. §102(b) reference). With respect to §102(e), the Smith patent is not prior art because the Smith patent is not a patent "by another." The Smith patent and the current application both have Gordon James Smith of Rochester Minnesota as the sole inventor. Therefore, it is respectfully submitted that a *prima facie* case of anticipation under §102(e) has not been made and the rejection is traversed.

Allowable Subject Matter

In light of the above, Applicant believes independent claim 1 and the claims depending therefrom, are in condition for allowance. Allowance of these claims is respectfully requested.

CONCLUSION

It is believed that all claims are now in a condition for allowance. Notice to that effect is respectfully requested.

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 500471.

Attached hereto is a marked-up version of the changes made to the specification and/or the claims by the current Amendment. The attached pages are captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE**".

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this response.

Respectfully submitted,

Gordon J. Smith,

By his attorneys,

DICKE, BILLIG & CZAJA, PLLC
Fifth Street Towers, Suite 2250
100 South Fifth Street
Minneapolis, MN 55402
Telephone: (612) 573-2004
Facsimile: (612) 573-2005

Date: April 17, 2003
TAC:jmc

Timothy A. Czaja
Reg. No. 39,649

CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Commissioner for Patents, Washington, D.C., 20231 on this 17th day of April, 2003.

By
Name: Timothy A. Czaja

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OIPE JC64
APR 2 8 2003
PATENT & TRADEMARK OFFICE

Applicant:	Gordon J. Smith	Examiner:	Eileen P. Morgan
Serial No.:	09/886,566	Group Art Unit:	3723
Filed:	June 21, 2001	Docket:	ROC9-2000-0206USI (I210.103.101)
Due Date:	**April 17, 2003**		

Title: METHOD OF BURNISHING A BURNISHABLE REAR PAD SLIDER IN A DISK DRIVE

AMENDMENT AND RESPONSE

Commissioner for Patents
Washington, D.C. 20231

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Dear Sir/Madam:

This Amendment is responsive to the Office Action mailed January 17, 2003. Please amend the above-identified patent application as follows:

IN THE CLAIMS

Please cancel claims 15-20.

1. A method of burnishing a rear pad of a slider within a disk drive, the rear pad being formed of a burnishable material and maintaining an element for reading and/or writing, the disk drive further including a spindle motor rotatably driving a disk and an actuator assembly positioning the slider over a surface of the disk, the method comprising:

rotating the disk;

radially moving the slider relative to the disk surface in a reciprocal fashion, causing the rear pad to rock; and

burnishing the rear pad via contact between the rear pad and the disk surface;

wherein the rear pad is burnished as the rear pad rocks, imparting a positive camber in the rear pad relative to the reading and/or writing element.

2. The method of claim 1, wherein the rear pad defines a height, and further wherein burnishing the rear pad includes reducing the height.

3. The method of claim 1, wherein the rear pad defines a leading surface, a trailing surface, opposing side surfaces, and a bottom surface opposite a support body of the slider, and further wherein radially moving the rear pad includes alternately contacting the opposing side surfaces against the disk surface.

4. The method of claim 3, wherein imparting a positive camber includes forming at least a portion of each of the opposing side surfaces to be non-perpendicular relative to the bottom surface.

5. The method of claim 4, wherein imparting a positive camber includes blending each of the opposing side surfaces relative to the bottom surface.

6. The method of claim 4, wherein a width of the rear pad is defined by a distance between the opposing sides, and further wherein imparting a positive camber includes establishing a minimum width of the rear pad at the bottom surface.

7. The method of claim 3, wherein following burnishing the opposing side surfaces are non-symmetrical.

8. The method of claim 1, wherein radially moving the slider relative to the disk surface includes radially accelerating the slider relative to the disk surface.

9. The method of claim 1, further comprising:
moving the slider tangentially relative to the disk surface, causing the rear pad to rock longitudinally.

10. The method of claim 9, further comprising:
correlating radial slider movement and tangential slider movement to optimize a shape of the rear pad following burnishing.

11. The method of claim 1, wherein radially moving the slider includes operating the actuator assembly in a first operational state when a height of the rear pad is relatively large and in a second operational state when the height is reduced, and further wherein the first operational state differs from the second operational state by at least one of radially slider velocity, radial slider acceleration, radial slider travel distance, and tangential slider velocity.

12. The method of claim 11, wherein the first operational state is characterized by an initial stage of burnishing and the second operational state is characterized by a final stage of burnishing, and further wherein the slider is moved a shorter radial distance in the second operational state as compared to the first operational state.

13. The method of claim 12, further comprising:

establishing parameters of the first operational state and the second operational state prior to radially moving the slider.

14. The method of claim 1, wherein the rear pad is burnished in-file.

15.(Cancelled) ~~A method of shaping a rear pad of a slider within a disk drive, the rear pad being formed of burnishable material and maintaining an element for reading and/or writing, the disk drive further including a spindle motor rotatably driving a disk and an actuator assembly positioning the slider over a surface of the disk, wherein during normal operation of the disk drive, rotation of the disk at a normal operational speed generates an air bearing between the slider and the disk surface, the air bearing dictating a fly height, the method comprising:~~

~~initially forming the rear pad to an increased height such that at the normal operational speed, the rear pad is loaded against the disk surface and the fly height is zero;~~

~~rotating the disk such that the rear pad rubs against the disk surface; and~~

~~radially moving the slider relative to the disk surface in a reciprocal fashion during a first burnishing mode, causing the rear pad to rock;~~

~~wherein during the first burnishing mode, contact between the rear pad and the disk surface causes the height of the rear pad to decrease and imparts a positive camber into the rear pad.~~

16.(Cancelled) ~~The method of claim 15, wherein a radial velocity and a radial travel distance of the slider during the first burnishing mode is predetermined.~~

17.(Cancelled) ~~The method of claim 15, wherein the first burnishing mode includes an initial burnishing stage and a secondary burnishing stage, the method further comprising:~~

~~establishing an initial wear level value for the rear pad; and~~

~~transitioning from the initial burnishing stage to the secondary burnishing stage once the rear pad has been burnished to the initial wear level value;~~

~~wherein a radial velocity of the slider and the secondary burnishing stage is less than a radial velocity of the slider in the initial burnishing stage.~~

18.(Cancelled) ~~The method of claim 17, wherein the first burnishing mode further includes a final burnishing stage, the method further comprising:~~

~~establishing a final wear level value for the rear pad; and~~

~~transitioning from the secondary burnishing stage to the final burnishing stage once the rear pad has been burnished to the final wear level value;~~

~~wherein a radial travel distance of the slider in the final burnishing stage is less than a radial travel distance of the slider in the secondary burnishing stage.~~

19.(Cancelled) ~~The method of claim 15, further comprising the steps of:~~

~~a)operating the disk drive at a normal operational speed following completion of the first burnishing mode, the slider flying above the disk surface at a fly height;~~

~~b) determining that a fly height correction is necessary;~~

~~c) operating the disk drive in a second burnishing mode, the second burnishing mode including:~~

~~temporarily decreasing a spacing between the rear pad and the disk surface;~~

~~radially moving the slider relative to the disk surface in a reciprocal fashion, causing the rear pads to rock;~~

~~wherein sides of the rear pad are burnished by the disk surface during the second burnishing mode; and~~

~~d) operating the disk drive under normal operational conditions, wherein the fly height has been altered by the burnishing in the second burnishing mode.~~

20.(Cancelled) ~~The method of claim 15, wherein a radial acceleration of the slider in the first burnishing mode is greater than a radial acceleration of the slider under normal operational conditions of the disk drive.~~